

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



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Application of Southern California
Edison Company (U338E) for Approval
of Contracts Resulting from Its 2014-
2015 Energy Storage Request for Offers
(ES RFO).

Application 15-12-003
(Filed December 1, 2015)

And Related Matter.

Application 15-12-004

**REPLY BRIEF OF THE
OFFICE OF RATEPAYER ADVOCATES
(PUBLIC)**

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TABLE OF CONTENTS

	<u>Pages</u>
I. INTRODUCTION	1
II. DISCUSSION.....	2
A. PG&E FAILS TO MEET ITS BURDEN OF PROOF ESTABLISHING REASONABLENESS.....	2
B. PG&E MISREPRESENTS THE IE’S REPORT	6
C. THE IE’S RECOMMENDATION TO APPROVE THE PSAS IS FLAWED.....	8
D. PG&E WEIGHTED THE EVALUATION PROCESS IN FAVOR OF THE PSAS	10
E. THE OLD KEARNEY AND MENDOCINO PSAS’ ON-LINE DATES ARE TOO LATE TO MEET FORECASTED OVERLOADS.....	12
1. Mendocino Substation	13
2. Old Kearney Substation	13
F. THE IDER AND DRP SHOULD NOT BE USED AS JUSTIFICATION FOR THE PSAS.....	15
III. CONCLUSION	16

I. INTRODUCTION

Pursuant to Rule 13.11 of the California Public Utilities Commission's (Commission) Rules of Practice and Procedure (Rules) and the May 19, 2016 *Email Ruling Granting Southern California Edison Company's Request for Extension of Time to File Reply Briefs* (Ruling), the Office of Ratepayer Advocates (ORA) hereby replies to parties' opening briefs submitted in the consolidated applications of Southern California Edison Company (SCE Application), Application (A.) 15-12-003,¹ and Pacific Gas and Electric Company (PG&E Application), A.15-12-004,² on May 25, 2016.

ORA addresses the following issues:

- PG&E fails to meet its burden of proof establishing the Old Kearney and Mendocino Purchase and Sales Agreements (PSAs) are just and reasonable.
- PG&E misrepresents the Independent Evaluator's (IE) Report;
- The IE's recommendation for approval of the PSAs is flawed;
- PG&E weighted the evaluation process in favor of the PSAs;
- The Old Kearney and Mendocino PSAs' on-line dates are too late to meet PG&E's forecasted overloads for the Mendocino and Old Kearney Substations; and,
- The Integrated Distributed Energy Resources³ (IDER) and Distributed Resources Plan⁴ (DRP) proceedings should not be used as justification for approving the PSAs.

¹ *Application of Southern California Edison Company (U 338E) for Approval of Contracts Resulting From its 2014 Energy Storage Request for Offers.*

² *Application of Pacific Gas and Electric Company[PG&E] for Approval of Agreements Resulting from Its 2014-2015 Energy Storage Solicitation and Related Cost Recovery.*

³ *Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning, and Evaluation of Integrated Distributed Energy Resources*, in Rulemaking (R.) R.14-10-003.

⁴ *Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769*, in R.14-08-013, et al.

For these reasons, the Commission should deny PG&E's request for approval of the Old Kearney and Mendocino PSAs.

II. DISCUSSION

A. PG&E Fails To Meet Its Burden Of Proof Establishing Reasonableness

PG&E's opening brief argues, "Because these relatively small storage projects will provide PG&E with experience in using storage to help the distribution grid, the Commission should approve them. ORA's objections to these two PSAs do not justify rejecting them."⁵ PG&E is incorrect. PG&E's request to own energy storage assets is conditional.⁶ In D.13-10-040, the Commission ordered, "[PG&E] must make a showing of cost-effectiveness and viability" using authorized evaluation methodologies.⁷

As the applicant in a ratesetting proceeding, the utility has the burden of proof to demonstrate its requests are reasonable.⁸ Specifically,

The utility "has the burden of affirmatively establishing the reasonableness of all aspects of its application. Intervenor do not have the burden of proving the unreasonableness of [the utility's] showing."⁹

In its application, PG&E bears the burden of proof to show that all aspects of the Old Kearney and Mendocino PSAs (and associated requests) are reasonable. It has failed

⁵ PG&E Opening Brief, p. 15.

⁶ D.13-10-040, Appendix A, p. 6.

⁷ D.13-10-040, Appendix A, p. 6. *See also* D.13-10-040, Ordering Paragraph 1, p. 78, which states, "The Energy Storage Procurement Framework and Design Program attached as Appendix A to this decision, is adopted."

⁸ *Re Southern California Edison Company* (1983), 11 CPUC 2d 47, 475 [D.83-05-036]:

Of course the burden of proof is on the utility applicant to establish the reasonableness of energy expenses sought to be recovered. We expect a substantial affirmative showing by each utility with percipient witnesses in support of all elements of its application.

⁹ *See*, D.08-12-058, p. 17; citing *Southern California Edison Test Year 2006 General Rate Application*, D.06-05-016, p. 7.

to do so. The preponderance of the evidence shows that the Old Kearney and Mendocino PSAs are not cost-effective.¹⁰ Specifically, the record evidence shows:

- The IE’s shortlist [REDACTED] — and the [REDACTED] —
- The PSAs are not cost-effective under any of the accepted evaluation methodologies:
 - The Net Market Value (NMV) results show the PSAs’ pricing and resource-specific characteristics have poor economic merit and do not provide a net economic benefit to PG&E.¹³
 - PG&E’s proprietary Portfolio Adjustment Value (PAV) results show the PSAs will contribute a net cost rather than a benefit to PG&E’s portfolio.¹⁴ (The PSAs are the only final contracts with [REDACTED] PAV values.¹⁵)
 - The PSAs received the [REDACTED] Consistent Evaluation Protocol (CEP) scores of all the final executed contracts.¹⁶
- The Old Kearney and Mendocino PSAs have negative deferral values—PG&E will not realize savings by deferring the traditional distribution substation transformers at the Old Kearney and Mendocino Substations, but rather will incur a net cost of [REDACTED].¹⁷

¹⁰ See *Decision Granting a Certificate of Public Convenience and Necessity for the Sunrise Powerlink Transmission Project* (2012) D.08-12-058, p. 17, which states, “The preponderance of the evidence is generally the default standard in civil and administrative law cases and we apply that standard in this decision.” *Citing*, California Administrative Hearing Practice, 2d Edition (2005), 365.

¹¹ Exh. PGE-1C, Vol. 4, p. C-90.

¹² Exh. PGE-1C, Vol. 4, p. C-95.

¹³ Exh. ORA-1C, p. 1-3, which states, “The Old Kearney PSA recorded a NMV of [REDACTED] and the Mendocino PSA recorded a NMV of [REDACTED].” (Citing PGE-1C, Vol. 4, Exh. 12, p. C-83.)

¹⁴ Exh. ORA-1C, p. 1-5, which states, “The Old Kearney PSA has a PAV of [REDACTED] while the Mendocino PSA has a PAV of [REDACTED].” (Citing PGE-1C, Vol. 4, Exh. 12, p. C-83.)

¹⁵ Exh. ORA-1C, pp. 1-6.

¹⁶ Exh. ORA-1C, ORA-Table 2, pp. 1-9; 1-10.

¹⁷ Exh. ORA-1C, p. 1-15. It states,

“The total estimated revenue requirement for the Old Kearney and Mendocino PSAs is [REDACTED] over the 10 year deferment period. Compared to PG&E’s purported saving of [REDACTED] to defer the

- The PSAs are demonstration projects under the Commission’s and PG&E’s definitions of “demonstration project.”¹⁸
- The PSAs are duplicative of at least two of PG&E’s Electric Program Investment Charge (EPIC) program projects¹⁹ and one PG&E DRP project,²⁰ in violation of Public Utilities Code Section 740.1(d)²¹ and Decision (D.) 12-05-037.²²
- In lieu of approving the PSAs, the traditional distribution substation transformer upgrades offer better solutions to address the reliability issues at and near the Old Kearney and Mendocino Substations.²³

PG&E’s reply testimony and opening brief fail to refute any of these listed facts. Rather, PG&E responds: (1) the PSAs may provide “lessons learned”²⁴ and (2) the PSAs have

substation distribution transformer upgrades for 10 years, the Old Kearney and Mendocino PSAs result in net costs of approximately [REDACTED]”

¹⁸ Exh. ORA-1C, pp. 1-17; 1-18. *See also*, ORA Opening Brief, pp. 9-12.

Note: Although PG&E claims the PSAs are not demonstration projects, it states that the lessons learned “from these small distribution deferral projects will be used to inform the industry efforts currently underway” like “PG&E used lessons learned from its sodium sulfur batteries to help advance the market and inform its procurement decisions in the 2014 ES RFO.” PG&E Opening Brief, p. 18-19. The sodium sulfur batteries PG&E refers to for this comparison is its “Sodium Sulfur (NaS) Battery Energy Storage System (BESS) Demonstration Project,” which is explicitly a *demonstration* project. *See* A.11-06-029, *Pacific Gas and Electric Company Smart Grid Deployment Plan 2011-2020*, Ch. 4 (Baseline Deployment), pp. 75-76. (<http://docs.cpuc.ca.gov/PublishedDocs/EFILE/A/138415.PDF>)

¹⁹ ORA Opening Brief, pp. 13-14. Citing A.12-11-003, Attachment 1, pp. 30-31 & 91-93. (<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M031/K735/31735305.PDF>).

²⁰ ORA Opening Brief, pp. 14-15. Citing *Assigned Commissioner’s Ruling (1) Refining Integration Capacity and Locational Net Benefits Analysis Methodologies and Requirements; and (2) Authorizing Demonstration Projects A and B*, Appendix B, pp. 7-9, filed May 2, 2016 in R.14-08-013. (<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M161/K474/161474143.PDF>).

²¹ Pub. Util. Code § 740.1(d) states, “Projects should not unnecessarily duplicate research currently, previously, or imminently undertaken by other electrical or gas corporations or research organizations.”

²² D.12-05-037, Ordering Paragraph 12(e), p. 104. The decision states, at p. 14:

Efficient Use of Ratepayer Monies – In addition to the above guiding principles, funding should not be used to support activities or efforts that are duplicative of efforts that are being undertaken elsewhere or that are more expensive than necessary to achieve the goals.

²³ ORA Opening Brief, pp. 15-29.

²⁴ PG&E Opening Brief, p. 18.

low notional values.²⁵ Neither of these claims is consistent with legislative statutes concerning energy storage or the Commission’s Energy Storage Program, nor does PG&E meet its burden of proving reasonableness as required by the law²⁶ and Commission policy.²⁷ In fact, the Legislature specifically directed the Commission to consider utility investment proposals intended to provide learning opportunities about energy storage elsewhere.²⁸ Even if used as an evaluation criterion, a “lessons learned” objective operates in the periphery and is not a determinative factor²⁹ as discussed below.

Further, PG&E’s claim that the PSAs should be approved because they have low notional values due to the small size of the projects should be rejected. This overtly ignores and violates the statutory provision that “*All* procurement of energy storage systems by a load-serving entity or local publicly owned electric utility shall be cost effective.”³⁰ The Legislature made no exception to the cost-effectiveness mandate, despite PG&E’s small project plea.³¹ PG&E’s claim also omits that notional value is only a fraction of the entire cost-calculation. PG&E identifies additional contingency costs and revenue requirements associated with the PSAs for which PG&E is also

²⁵ PG&E Opening Brief, p. 18.

²⁶ Pub. Util. Code §§ 2835-2839.

²⁷ See, D.13-10-040, *Adopts Energy Storage Procurement Framework and Design Program*; in Rulemaking (R.) 10-12-007. See also, D.14-10-045, *Decision Approving SDG&E, PG&E, and SCE’s Storage Procurement Framework and Program Applications for 2014 Biennial Procurement Period*; in A.14-02-006, et al.

²⁸ Pub. Util. Code § 2836(a)(4) states, “Nothing in this section prohibits the commission’s evaluation and approval of any application for funding or recovery of costs of any ongoing or new development, trialing, and testing of energy storage projects or technologies outside of the proceeding required by this chapter.”

²⁹ PG&E considers technology diversity as a lessons learned attribute. Exh. PGE-1C, Vol. 4, p. C-89. PG&E clarifies that it “considers technology diversity as one of the factors that could move an under-represented technology slightly higher in the ranking to establish the shortlist.” Exh. PGE-1C, Vol. 1, p. 4-6. It is not a determinative factor. As demonstrated elsewhere in this reply brief, there is a substantial disparity between the PSAs and the Energy Storage Agreements (ESA). This is further demonstrated in ORA’s testimony. See Exh. ORA-1C, pp. 1-5; 1-6. PG&E unreasonably used its lessons learned objective to incorporate the PSAs in its shortlist and to eventually select them.

³⁰ Pub.Util. Code § 2836.6 (Emphasis Added).

³¹ PG&E Opening Brief, p. 15.

seeking full cost-recovery.³² The record supports a finding that the PSAs are low-valued,³³ cost-ineffective offers,³⁴ and inconsistent with California law.³⁵ PG&E fails to meet its burden of proof and, therefore, its request for the approval for the Old Kearney and Mendocino PSAs cannot be found reasonable.

B. PG&E Misrepresents the IE's Report

The IE Report conclusively shows the Distribution Deferral offers are [REDACTED] [REDACTED]³⁶ and are [REDACTED].³⁷ Yet, PG&E’s opening brief invokes the IE Report for the proposition that the PSAs are reasonable, and argues, “The IE recognized the value of the Old Kearney and Mendocino PSA”³⁸ and that it ultimately recommended the Commission approve the PSAs.³⁹ However, PG&E fails to acknowledge the “[REDACTED]

[REDACTED]

[REDACTED],”⁴⁰

PG&E also fails to acknowledge the IE attempted to compromise, notwithstanding his initial decision [REDACTED]. The IE states:

³² ORA Opening Brief, pp. 5-6.

³³ Exh. PGE-1C, Vol. 4, p. C-95.

³⁴ ORA Opening Brief, p. 5.

³⁵ Pub.Util. Code §§ 451, 2835(a)(3), 2836(a), 2836.2(d), 2836.6, and 8360(g).

³⁶ Exh. PGE-1C, Vol. 4, p. C-89.

³⁷ Exh. PGE-1C, Vol. 4, p. C-95.

³⁸ PG&E Opening Brief, p. 19.

³⁹ PG&E Opening Brief, p. 20.

⁴⁰Exh. PGE-1C, Vol. 4, p. C-29.

[REDACTED]

Despite the IE's conclusion that "[REDACTED]
[REDACTED],"⁴² PG&E still selected the PSAs. PG&E's use of the IE's recommendation to support the PSAs is neither a complete nor accurate depiction of the totality of the IE's evaluation. The record shows PG&E chose the PSAs irrespective of the IE's initial findings,⁴³ [REDACTED],⁴⁴ subsequent attempt to compromise,⁴⁵ and final cost reasonableness conclusions for the Old Kearney⁴⁶ and Mendocino⁴⁷ PSAs. It should also be noted the IE's final conclusion withholds his finding that the PSA's provide a [REDACTED]

⁴¹ Exh. PGE-1C, Vol. 4, p. C-90.

⁴² Exh. PGE-1C, Vol. 4, p. C-90.

⁴³ Exh. PGE-1C, Vol. 4, pp. C-25 & C-26.

⁴⁴ Exh. PGE-1C, Vol. 4, p. C-94.

⁴⁵ Exh. PGE-1C, Vol. 4, p. C-90.

⁴⁶ Exh. PGE-1C, Vol. 4, p. C-278 & C-279, which states, [REDACTED]
[REDACTED]

⁴⁷ Exh. PGE-1C, Vol. 4, pp. C-301 & C-302, which states, "[REDACTED]
[REDACTED]
[REDACTED]"

[REDACTED].⁴⁸ Therefore, PG&E's use of the IE's Report misrepresents the big picture findings that the PSAs are [REDACTED].⁴⁹

C. The IE's Recommendation to Approve the PSAs Is Flawed

The responsibility of an IE is to "assess the competitiveness and integrity of its energy storage solicitation."⁵⁰ The IE's recommendation is flawed because it [REDACTED] his own assessment of bid evaluations⁵¹ and assumes benefits will be realized by "accelerat[ing] learnings about deferring costly substation upgrades with storage investments."⁵² This recommendation is [REDACTED] with the IE's determination the PSAs are not [REDACTED]

IEs are required to provide their assessment of the Request for Offer (RFO) process, bids, and whether executed contracts warrant Commission approval.⁵³ As noted above, based on the offers' evaluation, the IE determined the PSAs did not have

⁴⁸ Exh. PGE-1C, Vol. 4, p. C-302. *See*, Exh. PGE-1C, Vol. 4, p. C-279, which states,

[REDACTED]

⁴⁹ Exh. PGE-1C, Vol. 4, p. C-95.

⁵⁰ D.13-10-040, Ordering Paragraph 8, p. 78. *See also*, D.13-10-040, Appendix A, p. 10, which states, "The IE report shall include, at a minimum, an evaluation of the fairness of the IOUs solicitation and bid selection process, an assessment of project-specific negotiations, an analysis of the RFO bids, bid evaluation process (including valuation tools), an analysis of the overall market, and whether the contracts merit Commission approval."

⁵¹ *See* Exh. PGE-1C, Vol. 4, pp. C-281; C-304.

⁵² Exh. PGE-1C, Vol. 4, pp. C-281; C-304.

⁵³ *See* CPUC Independent Evaluator Report Template (Long Form). (<http://www.cpuc.ca.gov/workarea/downloadasset.aspx?id=10899>)

[REDACTED],⁵⁴ did not [REDACTED],⁵⁵ and even [REDACTED].⁵⁶ Yet, [REDACTED] to these findings, the IE’s final recommendation supports the inclusion of the PSAs. The IE gives no compelling reason to explain his abandonment of the overwhelming [REDACTED] economic findings other than citing to PG&E’s rationale.⁵⁷

As ORA’s testimony shows—and PG&E does not dispute—the PSAs result in net costs of approximately [REDACTED].⁵⁸ In other words, the complete cost to execute the two PSAs is *greater* than the value to defer the substation transformer upgrades.⁵⁹ Also, the substation transformer upgrades are better solutions to address the reliability issues identified at and near the Old Kearney and Mendocino Substations.⁶⁰ The IE did not make an assessment as to the validity of PG&E’s proposed reliability assumptions ascribed to the PSAs in relation to their cost-effectiveness.⁶¹ Nonetheless, the IE ultimately recommends the Commission approve the PSAs.

Also, PG&E considers technology diversity as a lessons learned attribute “that could move an under-represented technology slightly higher in the ranking to establish the shortlist.”⁶² It is not a determinative factor. For example, if two competing offers are similar in all other respects, then technology diversity may be used to slightly propel one

⁵⁴ Exh. PGE-1C, Vol. 4, p. C-90.

⁵⁵ Exh. PGE-1C, Vol. 4, p. C-91.

⁵⁶ Exh. PGE-1C, Vol. 4, p. C-90.

⁵⁷ PG&E’s rationale to execute the Mendocino and Old Kearney PSAs is their low notional value, opportunity for lessons learned, and other desirable diversity features. Exh. PGE-1C, Vol. 4, pp. C-90.

⁵⁸ Exh. ORA-1C, p. 1-15.

⁵⁹ Exh. ORA-1C, p. 1-15.

⁶⁰ ORA Opening Brief, pp. 15-28.

⁶¹ It is incumbent upon PG&E to show that the proposed distribution deferral projects are capable of fulfilling the underlying functions for which they are intended to defer. Nowhere in PG&E’s testimony or in the IE Report has this showing been made.

⁶² Exh. PGE-1C, Vol. 1, p. 4-6; Vol. 4, p. C-89.

under-represented technology or use case. In the instant case, the IE was not presented with that scenario. The battery technology of the PSAs were well represented in PG&E's final shortlist and the PSAs' general economics did not reach a level of competitiveness allowing a slight move up the shortlist. In fact, the IE found there is a [REDACTED] [REDACTED] between the PSAs and the Energy Storage Agreements (ESA) and thus, [REDACTED] [REDACTED].⁶³

Accordingly, the IE's final recommendation in support of the Mendocino and Old Kearney PSAs is contrary to the storage statutes requiring energy storage procurement to be cost-effective.⁶⁴ It is also inconsistent with D.13-10-040, which "requires that energy storage systems procured be viable and cost-effective."⁶⁵ The Commission did not permit, and it is unreasonable for, PG&E and the IE to disregard the explicit cost-effective mandate. The ultimate and consistent test for energy storage procurement is a showing of cost-effectiveness. Even taking into account other factors, the PSAs are not cost-effective and, therefore, they cannot be found reasonable.

D. PG&E Weighted The Evaluation Process In Favor Of The PSAs

PG&E claims its evaluation process was reasonable,⁶⁶ but the record shows PG&E placed undue weight on its lessons learned objective in order to select the PSAs. The IE's observations of the submitted offers indicate the PSAs have [REDACTED] evaluations.⁶⁷ PG&E's Evaluation Committee observed the same or similar findings.⁶⁸ [REDACTED]

⁶³ Exh. PGE-1C, Vol. 4, p. C-91.

⁶⁴ Pub. Util. Code § 2385. Section 2385(a)(3) states: "An 'energy storage system' shall be cost effective and either reduce emissions of greenhouse gases, reduce demand for peak electrical generation, defer or substitute for an investment in generation, transmission, or distribution assets, or improve the reliable operation of the electrical transmission or distribution grid."

⁶⁵ D.13-10-040, FOF 17, p. 72.

⁶⁶ PG&E Opening Brief, p. 9.

⁶⁷ Exh. PGE-1C, Vol. 4, pp. C-25; C-26.

⁶⁸ Exh. PGE-1C, Vol. 4, p. C-27. [REDACTED]

[REDACTED]

[REDACTED].⁶⁹ However, despite the evaluation results, PG&E shortlisted [REDACTED].⁷⁰

The IE indicates [REDACTED]

[REDACTED].⁷¹ This led to the selection of two uneconomical PSAs. Specifically, the IE states:

[T]he fairness and comparability issue that most affected the final selection was the [PG&E] Evaluation Team decision to incorporate the procurement objective of obtaining a mix of project attributes by looking for, and selecting, projects by type and contribution to a broad learning experience. [REDACTED]

[REDACTED].⁷²

The record shows PG&E selected the PSAs because of diversity and for learning purposes, overlooking the PSAs' dismal economics.⁷³ This is inconsistent with Public Utilities Code Section 2835(a)(3), which expressly states that energy storage "shall be cost effective."⁷⁴ It is also inconsistent with D.13-10-010 which "requires that energy

⁶⁹ Exh. PGE-1C, Vol. 4, p. C-29.

⁷⁰ Exh. PGE-1C, Vol. 4, p. C-29. [REDACTED]

⁷¹ Exh. PGE-1C, Vol. 4, p. C-95.

⁷² Exh. PGE-1C, Vol. 4, p. C-89.

⁷³ Exh. PGE-1C, Vol. 4, p. C-95.

⁷⁴ Pub.Util. Code § 2835(a)(3) states, "An 'energy storage system' shall be cost effective and either reduce emissions of greenhouse gases, reduce demand for peak electrical generation, defer or substitute for an investment in generation transmission, or distribution assets, or improve the reliable operation of

storage systems procured be viable and cost-effective.”⁷⁵ PG&E itself finds that the PSAs are low valued⁷⁶ and uneconomical,⁷⁷ and does not dispute ORA’s findings that the PSAs have [REDACTED] NMV⁷⁸ and PAV⁷⁹ scores, have [REDACTED] CEP⁸⁰ rankings, and have negative deferment values (i.e., net cost rather than savings).⁸¹

E. The Old Kearney And Mendocino PSAs’ On-Line Dates Are Too Late To Meet Forecasted Overloads

In its opening brief, PG&E argues, “[t]he two executed PSAs will each provide one MW of energy storage to enable PG&E to maintain distribution reliability. They will do so by storing energy from the grid for later discharge to lower the load on distribution feeders at times when the associated transformers would otherwise be expected to be overloaded.”⁸² As shown in ORA Tables-01 and -02, PG&E fails to acknowledge the Mendocino Substation’s and Old Kearney Substation’s transformers are already forecasted to overload starting in 2016. Thus, no reasonable justification exists to allow these distribution substation transformers to remain overloaded until the PSAs’ scheduled May 1, 2018 online dates.⁸³

the electrical transmission or distribution grid.”

⁷⁵ D.13-10-040, FOF 17, p. 72.

⁷⁶ PG&E Opening Brief, p. 18, which states, “Based on PG&E’s overall valuation process, these PSA projects did not value as highly as the ESA projects.”

⁷⁷ PG&E Opening Brief, p. 17, which states, “PG&E recommends that these contracts be approved, even though they are not the least expensive on the NMV basis.”

⁷⁸ Exh. ORA-1C, 1-2 to 1-5.

⁷⁹ Exh. ORA-1C, 1-5 to 1-7.

⁸⁰ Exh. ORA-1C, 1-8 & 1-8.

⁸¹ Exh. ORA-1C, 1-10 to 1-16.

⁸² PG&E Opening Brief, p. 16 [cite omitted].

⁸³ PG&E Opening Brief, p. 15.

1. Mendocino Substation

PG&E provides a distribution load forecast at Mendocino Substation for the time period of 2016 through 2018. PG&E explains, “Mendocino Bank 2 is forecast to be loaded to 5.20 MW or 106 percent in 2016, loaded to 5.24 MW or 107 percent in 2017, and loaded to 5.3 MW or 108 percent in 2018.”⁸⁴ ORA Table-01, below, depicts the Mendocino Substation overloads across 2016 and 2017.

ORA Table-01⁸⁵
Forecasted Load (MW) Served by Mendocino Bank 2 (2016-2017)

Bank Name	Volt In	Volt out	2016 Forecast				2017 Forecast			
			Normal Capacity (MW)	Before Work Loading (MW)	After Work Loading (MW)	Loading (%)	Normal Capacity (MW)	Before Work Loading (MW)	After Work Loading (MW)	Loading (%)
MENDOCINO BANK 2	60	12	4.9	5.2	5.2	106%	4.9	5.2	5.2	107%

Based upon PG&E’s distribution forecasts for the Mendocino Substation, Mendocino Substation’s Bank 2 transformers will face heavy overloads for *nearly two years* before the Mendocino PSA would be available. This is an unreasonable risk to the electrical infrastructure and to customers considering the traditional distribution substation transformer upgrade has a scheduled online date of approximately [REDACTED]

[REDACTED] ⁸⁶

2. Old Kearney Substation

Similarly, PG&E provides a distribution load forecast at Old Kearney Substation for the time period of 2016 through 2018. PG&E explains, “Old Kearney Bank 1 is forecast to be loaded to 17.7 MW or 101% in 2016, loaded to 18.1 MW or 103% in 2017,

⁸⁴ Exh. ORA-1C, Appendix A, p. 9, Response to ORA_004-Q3.

⁸⁵ Exh. ORA-1C, Appendix A, pp. 6-7, Response to ORA_004-Q2.

⁸⁶ Exh. ORA-2C.

and loaded to 18.5 MW or 105% in 2018.”⁸⁷ ORA Table-02, below, depicts the Old Kearney Substation overloads across 2016 and 2017.

ORA Table-02⁸⁸
Forecasted Load (MW) Served by Old Kearney Banks 1 and 3 (2016-2017)

Bank Name	Volt In	Volt out	2016 Forecast				2017 Forecast			
			Normal Capacity (MW)	Before Work Loading (MW)	After Work Loading (MW)	Loading (%)	Normal Capacity (MW)	Before Work Loading (MW)	After Work Loading (MW)	Loading (%)
KEARNEY BANK 1	70	12	17.6	17.7	17.7	101%	17.6	18.1	18.1	103%
KEARNEY BANK 3	70	12	12.4	11.8	11.8	96%	12.4	12.0	12.0	97%

The traditional distribution substation transformer upgrades to Old Kearney Bank 3 are needed to relieve Old Kearney Bank 1’s forecasted overloads. PG&E explains, “upgrades at Old Kearney Substation are required because the distribution projected load exceeds the existing capacity of Old Kearney Substation Bank 1”⁸⁹ and replacing Old Kearney Bank 3 allows PG&E to move “load from Old Kearney Bank 1 over to the new larger Bank 3.”⁹⁰

Waiting for the Old Kearney PSA’s May 1, 2018 online date is ill-advised in light of PG&E’s Old Kearney Substation forecasted overloads for the next two years. Instead, it is appropriate for PG&E to pursue its strategy that “[i]f load is projected to exceed the transformer bank capacity, the utility distribution company will eventually need to replace a transformer.”⁹¹

⁸⁷ Exh. ORA-1C, Appendix A, p. 21, Response to ORA_005-Q3.

⁸⁸ Exh. ORA-1C, Appendix A, p. 19-20, Response to ORA_005-Q2.

⁸⁹ Exh. ORA-1C, Appendix A, p. 23, Response to ORA_005-Q5.

⁹⁰ Exh. ORA-1C, Appendix A, p. 22, Response to ORA_005-Q4.

⁹¹ PG&E Opening Brief, p. 16 [cite omitted].

F. The IDER And DRP Should Not Be Used As Justification For The PSAs

PG&E's opening brief argues, "[g]iven the current Commission proceedings such as the Distribution Resources Plan (DRP) and the Integrated Distributed Energy Resources (IDER), it is critical for PG&E to begin to learn how these alternative distributed energy resources can be used to meet distribution system needs."⁹²

Neither the DRP nor the IDER is identified as a purpose for which the utilities are authorized to procure under the Commission's Energy Storage Program.⁹³ PG&E did not assert the DRP or the IDER as rationale for selecting the PSAs. Rather, PG&E only identifies the IDER and DRP in its rebuttal testimony and opening brief in support of its decision to select the PSAs despite their negative evaluations.⁹⁴ This rationale is misplaced.

Furthermore, the IDER and DRP proceedings are currently active—the Commission has not yet made any final determinations with respect to how energy storage will assist in their efforts. In fact, the Commission directed the utilities in the DRP proceeding to conduct demonstration projects to provide a variety of lessons learned. As ORA details in its opening brief, the Commission already authorized PG&E to conduct a demonstration project to evaluate "if [the Central Fresno distribution planning area] distribution transformer capacity can be deferred beyond three years."⁹⁵ The PSAs duplicate this demonstration project's objectives and purpose. To the extent energy storage procurement addresses the Commission's IDER or DRP objectives, the appropriate places to consider those issues are those IDER and DRP proceedings—not

⁹² PG&E Opening Brief, p. 18.

⁹³ D.13-10-040, Appendix A, p. 1.

⁹⁴ Exh. PGE-3, p. 3-2.

⁹⁵ ORA Opening Brief, p. 15; citing, *Ruling Authorizing Demonstration Projects A and B*, Appendix B, p. 8 in R.14-08-013.

the Energy Storage Program. As described in ORA's testimony and opening brief,⁹⁶ EPIC is the appropriate program to fund demonstration projects.

III. CONCLUSION

PG&E fails to meet its burden of proof to affirmatively establish reasonableness of all aspects of its application.⁹⁷ For this reason, and the reasons identified in ORA's testimony and filings, the Commission should deny PG&E's request for approval of the Old Kearney and Mendocino PSAs.

Respectfully submitted,

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⁹⁶ Exh. ORA-1C, pp. 1-17 – 1-18; ORA Opening Brief, pp. 13-14.

⁹⁷ See *In the Matter of the Application of California Water Company* (2003) D.03-09-021, p. 17:

As the Applicant, SCE must meet the burden of proving that it is entitled to the relief it is seeking in this proceeding. *SCE has the burden of affirmatively establishing the reasonableness of all aspects of its application.* Intervenor's do not have the burden of proving the unreasonableness of SCE's showing. [emphasis added]